

WHAT WE CLAIM IS:

1. A trampoline and enclosure system including:
  - a flexible mat;
  - a plurality of resiliently flexible spring rods each having a lower end retained by a frame of the trampoline and an upper end coupled to the mat about a periphery of the mat;
  - a barrier of a flexible material surrounding the mat above the mat and having a lower peripheral part coupled directly or indirectly to the mat; and
  - a plurality of generally upright enclosure support members outside of the barrier relative to the mat which are resiliently flexible over at least the major part of the lengths thereof and which are retained at or towards the lower ends of the enclosure support members and which support the net above the mat, which are free to deform away from the mat when impacted by a user against an enclosure support member and/or against said barrier of flexible material, the barrier connecting together the enclosure support members at or towards an upper peripheral edge part of the barrier and at or towards the upper ends of the enclosure members so that at least said upper peripheral part of the net is in tension and so that such resilient deformation of one of the enclosure support members away from the mat causes resilient deformation of opposite enclosure support members towards the mat.
2. A trampoline and enclosure system according to claim 1, wherein said barrier comprises a flexible net material.
3. A trampoline and enclosure system according to either of claims 1 and 2 wherein the enclosure support members are resiliently flexible rods.
4. A trampoline and enclosure system according to any one of claims 1 to 3, wherein the enclosure support members are pultruded fibreglass rods.
5. A trampoline and enclosure system according to any one of claims 1 to 4 wherein the barrier is supported by the enclosure support members by connections

between the barrier at or towards an upper peripheral edge part of the barrier and the enclosure support members at or towards the upper ends of the enclosure support members which draw the upper ends of the enclosure support members away from their natural rest state (when connected only at their lower ends to the frame of the trampoline), and towards the centre of the mat.

6. A trampoline and enclosure system according to any one of claims 1 to 4 including a flexible connecting element which connects the enclosure support members at or towards the upper ends of the enclosure support members to draw the upper ends of the enclosure support members away from their natural rest state (when connected only at their lower ends to the frame of the trampoline), and towards the centre of the mat.
7. A trampoline and enclosure system according to claim 6 wherein said flexible connecting element is fixed to or integral with the barrier at or towards an upper peripheral part of the barrier.
8. A trampoline and enclosure system according to any one of claims 1 to 7, wherein the enclosure support members are retained by the frame of the trampoline at about the level on the frame of the trampoline at which the lower ends of the flexible spring rods are also retained by the frame of the trampoline.
9. A trampoline and enclosure system according to any one of claims 1 to 8 wherein the lower ends of the enclosure support members are retained by the frame of the trampoline so that in their natural rest state (when connected only at the lower ends to the frame of the trampoline) the enclosure support members extend away from the mat.
10. A trampoline and enclosure system according to any one of claims 1 to 9 wherein the barrier includes a series of pockets on an outside of the barrier which engage over upper ends of the enclosure support members.

11. A trampoline and enclosure system according to claim 10 wherein said pockets are at least half the length of the enclosure support members.
12. A trampoline and enclosure system according to either of claims 10 and 11 wherein the enclosure support members each comprise an enlarged upper end.
13. A trampoline and enclosure system according to any one of claims 1 to 12 wherein the upper ends of the flexible spring rods pass through a lower peripheral section of the barrier below the mat to couple the barrier to the mat.
14. A trampoline and enclosure system including:
  - a flexible mat;
  - a plurality of resiliently flexible spring rods each extending between a base frame of the trampoline and a periphery of the mat;
  - a barrier of a flexible material surrounding the mat above the mat and having a lower peripheral part coupled directly or indirectly to the mat; and a plurality of enclosure support rods coupled to the trampoline only by a lower end of each enclosure support rod being retained by the base frame of the trampoline, and which extend above the mat to support the net above the mat, and which are each resiliently flexible over substantially the entire length thereof and which are the barrier connecting together the enclosure support members at or towards an upper peripheral edge part of the barrier and at or towards the upper ends of the enclosure members so that at least said upper peripheral part of the net is in tension and so that such resilient deformation of one of the enclosure support members away from the mat causes resilient deformation of opposite enclosure support members towards the mat.
15. A trampoline and enclosure system according to claim 14, wherein said barrier comprises a flexible net material.
16. A trampoline and enclosure system according to either of claims 14 and 15, wherein the enclosure support rods are pultruded fibreglass rods.

17. A trampoline and enclosure system according to any one of claims 14 to 16 wherein the barrier is supported by the enclosure support rods by connections between the barrier at or towards an upper peripheral edge part of the barrier and the enclosure support rods at or towards the upper ends of the enclosure support rods which draw the upper ends of the enclosure support rods away from their natural rest state (when connected only at their lower ends to the frame of the trampoline), and towards the centre of the mat.
18. A trampoline and enclosure system according to any one of claims 14 to 16 including a flexible connecting element which connects the enclosure support rods at or towards the upper ends of the enclosure support rods to draw the upper ends of the enclosure support rods away from their natural rest state (when connected only at their lower ends to the frame of the trampoline), and towards the centre of the mat.
19. A trampoline and enclosure system according to any one of claims 14 to 18, wherein the enclosure support rods are retained by the frame of the trampoline at about the level on the frame of the trampoline at which the lower ends of the flexible spring rods are also retained by the frame of the trampoline.
20. A trampoline and enclosure system according to any one of claims 14 to 19 wherein the lower ends of the enclosure support rods are retained by the frame of the trampoline so that the natural rest state (when connected only at the lower ends to the frame of the trampoline) the enclosure support rods extend away from the mat.
21. A trampoline and enclosure system including:
- a flexible mat;
  - a plurality of resiliently flexible spring rods each having a lower end retained by a frame of the trampoline and an upper end coupled to the mat about a periphery of the mat;
  - a barrier of a flexible material surrounding the mat above the mat and having a lower peripheral part coupled directly or indirectly to the mat; and

a plurality of resiliently flexible generally upright enclosure support members outside of the barrier relative to the mat and which are retained at or towards the lower ends of the enclosure support members by the frame of the trampoline and which support the barrier above the mat, which enclosure support members are connected together at or towards the upper ends of the enclosure support members to draw the upper ends of the enclosure support members away from their natural rest state (when connected only at their lower ends to the frame of the trampoline), and towards the centre of the mat to tension the barrier.

22. A trampoline and enclosure system according to claim 21, wherein said barrier comprises a flexible net material.
23. A trampoline and enclosure system according to either of claims 21 and 22 wherein the enclosure support members are resiliently flexible rods.
24. A trampoline and enclosure system according to any one of claims 21 to 23, wherein the enclosure support members are pultruded fibreglass rods.
25. A trampoline and enclosure system according to any one of claims 21 to 24 wherein the barrier is supported by the enclosure support members by connections between the barrier only at or towards an upper peripheral edge part of the barrier and the enclosure support members.
26. A trampoline and enclosure system according to any one of claims 21 to 24 including a flexible connecting element which connects the enclosure support members at or towards the upper ends of the enclosure support members.
27. A trampoline and enclosure system according to claim 26 wherein said flexible connecting element is fixed to or integral with the barrier at or towards an upper peripheral part of the barrier.

28. A trampoline and enclosure system according to any one of claims 21 to 27, wherein the enclosure support members are retained by the frame of the trampoline at about the level on the frame of the trampoline at which the lower ends of the flexible spring rods are also retained by the frame of the trampoline.

29. A trampoline and enclosure system according to any one of claims 21 to 28 wherein the lower ends of the enclosure support members are retained by the frame of the trampoline so that in their natural rest state (when connected only at the lower ends to the frame of the trampoline) the enclosure support members extend away from the mat.

30. A trampoline and enclosure system including:

- a flexible mat;

- a plurality of resiliently flexible spring rods each having a lower end retained by a frame of the trampoline and an upper end coupled to the mat about a periphery of the mat;

- a plurality of resiliently flexible generally upright enclosure support members retained at or towards the lower ends of the enclosure support members by the frame of the trampoline and which are connected together at or towards the upper ends of the enclosure support members to draw the upper ends of the enclosure support members away from their natural rest state (when connected only at their lower ends to the frame of the trampoline) and towards the centre of the mat so that the area bounded by the upper ends of the enclosure support members is not greater than the area of the mat; and

- a barrier of a flexible material surrounding the mat above the mat and within the enclosure support members and supported above the mat in tension by the enclosure support members.

31. A trampoline and enclosure system according to claim 30, wherein said barrier comprises a flexible net material.

32. A trampoline and enclosure system according to either of claims 30 and 31 wherein the enclosure support members are resiliently flexible rods.

33. A trampoline and enclosure system according to any one of claims 30 to 32, wherein the enclosure support members are pultruded fibreglass rods.

34. A trampoline and enclosure system according to any one of claims 30 to 33 wherein the barrier is supported by the enclosure support members by connections between the barrier only at or towards an upper peripheral edge part of the barrier and the enclosure support members.

35. A trampoline and enclosure system according to any one of claims 30 to 34 wherein the lower ends of the enclosure support members are retained by the frame of the trampoline so that in their natural rest state (when connected only at the lower ends to the frame of the trampoline) the enclosure support members extend away from the mat.